

Titles of Most Frequently Occurring Classifications of Patents Returned  
From A Search of 09923413 on November 27, 2002

6 62/160 (4 OR, 2 XR)

Class 062 : REFRIGERATION

62/132 AUTOMATIC CONTROL

62/159 .Selective heating or cooling

62/160 ..Reversible cycle machine

6 62/90 (0 OR, 6 XR)

Class 062 : REFRIGERATION

62/56 PROCESSES

62/89 .Circulating external gas

62/90 ..With reheating

6 237/12.3B (4 OR, 2 XR)

Class 237 : HEATING SYSTEMS

237/12.1 HEAT AND POWER PLANTS

237/12.3R .Vehicle

237/12.3B ..The heating is effected by circulated hot  
water

5 62/324.6 (0 OR, 5 XR)

Class 062 : REFRIGERATION

62/324.1 REVERSIBLE, I.E., HEAT PUMP

62/324.6 .With flow control or compressor details

5 62/6 (5 OR, 0 XR)

Class 062 : REFRIGERATION

62/6 GAS COMPRESSION, HEAT REGENERATION AND  
EXPANSION, E.G., STIRLING CYCLE

4 165/299 (2 OR, 2 XR)

Class 165 : HEAT EXCHANGE

165/200 WITH TIMER, PROGRAMMER, TIME DELAY, OR  
CONDITION RESPONSIVE CONTROL

165/287 .Temperature responsive or control

165/299 ..Flow of one heat exchange material controlled  
by temperature of another

4 237/12.3R (2 OR, 2 XR)

Class 237 : HEATING SYSTEMS

237/12.1 HEAT AND POWER PLANTS

237/12.3R .Vehicle

- 3 62/186 (0 OR, 3 XR)  
Class 062 : REFRIGERATION  
62/132 AUTOMATIC CONTROL  
62/177 .Of external fluid or means  
62/186 ..Air controller or director
- 3 62/196.3 (1 OR, 2 XR)  
Class 062 : REFRIGERATION  
62/132 AUTOMATIC CONTROL  
62/190 .Refrigeration producer  
62/196.1 ..Bypass, e.g., compressor unloading  
62/196.3 ...Direct bypass of compressor
- 3 62/238.6 (0 OR, 3 XR)  
Class 062 : REFRIGERATION  
62/238.1 DISPARATE APPARATUS UTILIZED AS HEAT SOURCE OR  
ABSORBER  
62/238.6 .With vapor compression system
- 3 62/476 (1 OR, 2 XR)  
Class 062 : REFRIGERATION  
62/467 REFRIGERATION PRODUCER  
62/476 .Sorbent type
- 3 122/26 (1 OR, 2 XR)  
Class 122 : LIQUID HEATERS AND VAPORIZERS  
122/26 FRICTION GENERATOR
- 3 126/247 (0 OR, 3 XR)  
Class 126 : STOVES AND FURNACES  
126/383.1 ..Collecting, directing, or shielding feature  
for overflow or spatter of the liquid  
126/247 .Frictional
- 3 165/122 (1 OR, 2 XR)  
Class 165 : HEAT EXCHANGE  
165/120 WITH IMPELLER OR CONVEYOR MOVING EXCHANGE  
MATERIAL  
165/121 .Mechanical gas pump  
165/122 ..Heating or cooling means and gas pump in  
housing
- 3 165/240 (1 OR, 2 XR)  
Class 165 : HEAT EXCHANGE  
165/200 WITH TIMER, PROGRAMMER, TIME DELAY, OR

CONDITION RESPONSIVE CONTROL

- 165/201 .Having heating and cooling capability
- 165/240 ..Heat pump and supplemental heat source

3 237/12.3A (1 OR, 2 XR)

Class 237 : HEATING SYSTEMS

237/12.1 HEAT AND POWER PLANTS

237/12.3R .Vehicle

237/12.3A ..The heating is effected by circulated air

2 60/520 (0 OR, 2 XR)

Class 060 : POWER PLANTS

60/516 MOTOR OPERATED BY EXPANSION AND/OR CONTRACTION  
OF A UNIT OF MASS OF MOTIVATING MEDIUM

60/517 .Unit of mass is a gas which is heated or  
cooled in one of a plurality of constantly communicating  
expandible chambers and freely transferable therebetween

60/520 ..Having free floating displacer or transfer  
piston

2 62/158 (2 OR, 0 XR)

Class 062 : REFRIGERATION

62/132 AUTOMATIC CONTROL

62/157 .Time or program actuator

62/158 ..Time delay of condition sensing or control  
operation

2 62/238.7 (0 OR, 2 XR)

Class 062 : REFRIGERATION

62/238.1 DISPARATE APPARATUS UTILIZED AS HEAT SOURCE OR  
ABSORBER

62/238.6 .With vapor compression system

62/238.7 ..Reversible, i.e., heat pump

2 62/324.1 (1 OR, 1 XR)

Class 062 : REFRIGERATION

62/324.1 REVERSIBLE, I.E., HEAT PUMP

2 62/324.5 (0 OR, 2 XR)

Class 062 : REFRIGERATION

62/324.1 REVERSIBLE, I.E., HEAT PUMP

62/324.5 .With atmospheric condensate removal or  
prevention

2 62/434 (0 OR, 2 XR)

- Class 062 : REFRIGERATION
- 62/430 INTERMEDIATE FLUID CONTAINER TRANSFERRING HEAT  
TO HEAT ABSORBER OR HOLDOVER
- 62/434 .Flow line connected transfer fluid supply and  
heat exchanger
- 2 62/484 (2 OR, 0 XR)
- Class 062 : REFRIGERATION
- 62/467 REFRIGERATION PRODUCER
- 62/476 .Sorbent type
- 62/484 ..Vapor-liquid contact in reabsorber forming  
liquid refrigerant
- 2 62/515 (0 OR, 2 XR)
- Class 062 : REFRIGERATION
- 62/467 REFRIGERATION PRODUCER
- 62/515 .Evaporator, e.g., heat exchanger
- 2 123/142.5R (1 OR, 1 XR)
- Class 123 : INTERNAL-COMBUSTION ENGINES
- 123/142.5R WITH HEATING MEANS
- 2 123/563 (1 OR, 1 XR)
- Class 123 : INTERNAL-COMBUSTION ENGINES
- 123/434 CHARGE FORMING DEVICE (E.G., POLLUTION CONTROL)
- 123/559.1 .Supercharger
- 123/563 ..Intercooler
- 2 126/39J (0 OR, 2 XR)
- Class 126 : STOVES AND FURNACES
- 126/99R HOT-AIR FURNACES
- 126/1R .Cooking
- 126/55 ..Combined base and hot closet
- 126/39R ...Gas
- 126/39J ....Hot plates with radiants
- 2 126/643 (0 OR, 2 XR)
- Class 126 : STOVES AND FURNACES
- 126/569 SOLAR HEAT COLLECTOR
- 126/634 .With means to convey fluent medium through  
collector
- 126/643 ..With heat exchanger
- 2 126/92R (0 OR, 2 XR)

Class 126 : STOVES AND FURNACES

126/99R HOT-AIR FURNACES

126/58 .Heating

126/79 ..Smoke and gas returning

126/85R ...Gas

126/92R ....Incandescent fire grate

2 165/10 (0 OR, 2 XR)

Class 165 : HEAT EXCHANGE

165/4 REGENERATOR

165/10 .Heat collector

2 165/104.21 (0 OR, 2 XR)

Class 165 : HEAT EXCHANGE

165/104.11 INTERMEDIATE FLUENT HEAT EXCHANGE MATERIAL  
RECEIVING AND DISCHARGING HEAT

165/104.19 .Liquid fluent heat exchange material

165/104.21 ..Utilizing change of state

2 165/104.27 (0 OR, 2 XR)

Class 165 : HEAT EXCHANGE

165/104.11 INTERMEDIATE FLUENT HEAT EXCHANGE MATERIAL  
RECEIVING AND DISCHARGING HEAT

165/104.19 .Liquid fluent heat exchange material

165/104.21 ..Utilizing change of state

165/104.27 ...With pressurizing means or degassifying  
means

2 165/104.33 (2 OR, 0 XR)

Class 165 : HEAT EXCHANGE

165/104.11 INTERMEDIATE FLUENT HEAT EXCHANGE MATERIAL  
RECEIVING AND DISCHARGING HEAT

165/104.19 .Liquid fluent heat exchange material

165/104.33 ..Cooling electrical device

2 165/104.34 (0 OR, 2 XR)

Class 165 : HEAT EXCHANGE

165/104.11 INTERMEDIATE FLUENT HEAT EXCHANGE MATERIAL  
RECEIVING AND DISCHARGING HEAT

165/104.34 .Including means to move gaseous heat exchange  
material

2 165/153 (0 OR, 2 XR)

Class 165 : HEAT EXCHANGE

165/148 RADIATOR CORE TYPE

- 165/152      .Deformed sheet forms passages between  
                  side-by-side tube means
- 165/153      ..With tube manifold
- 2 165/154    (0 OR, 2 XR)  
Class 165 : HEAT EXCHANGE  
165/154      NON-COMMUNICATING COAXIAL ENCLOSURES
- 2 165/164    (0 OR, 2 XR)  
Class 165 : HEAT EXCHANGE  
165/164      FLOW PASSAGES FOR TWO CONFINED FLUIDS
- 2 165/165    (2 OR, 0 XR)  
Class 165 : HEAT EXCHANGE  
165/164      FLOW PASSAGES FOR TWO CONFINED FLUIDS  
165/165      .Interdigitated plural first and plural second  
                  fluid passages
- 2 165/166    (0 OR, 2 XR)  
Class 165 : HEAT EXCHANGE  
165/164      FLOW PASSAGES FOR TWO CONFINED FLUIDS  
165/165      .Interdigitated plural first and plural second  
                  fluid passages  
165/166      ..Stacked plates or shells form interplate  
                  passages
- 2 165/294    (2 OR, 0 XR)  
Class 165 : HEAT EXCHANGE  
165/200      WITH TIMER, PROGRAMMER, TIME DELAY, OR  
                  CONDITION RESPONSIVE CONTROL  
165/287      .Temperature responsive or control  
165/288      ..Plural temperature sensors  
165/294      ...Branched flow of heat exchange material
- 2 165/297    (0 OR, 2 XR)  
Class 165 : HEAT EXCHANGE  
165/200      WITH TIMER, PROGRAMMER, TIME DELAY, OR  
                  CONDITION RESPONSIVE CONTROL  
165/287      .Temperature responsive or control  
165/296      ..Branched flow of heat exchange material  
165/297      ...Bypass of heat exchanger
- 2 165/42     (1 OR, 1 XR)  
Class 165 : HEAT EXCHANGE  
165/41        WITH VEHICLE FEATURE

- 165/42      .Heating and cooling
- 2 165/64      (0 OR, 2 XR)  
Class 165 : HEAT EXCHANGE  
165/58      HEATING AND COOLING  
165/61      .Heating and cooling of the same material  
165/64      ..Heat generator
- 2 237/12.3C      (0 OR, 2 XR)  
Class 237 : HEATING SYSTEMS  
237/12.1      HEAT AND POWER PLANTS  
237/12.3R      .Vehicle  
237/12.3C      ..The heating system includes a combustion type  
heater
- 2 422/198      (0 OR, 2 XR)  
Class 422 : CHEMICAL APPARATUS AND PROCESS DISINFECTING,  
DEODORIZING, PRESERVING, OR STERILIZING  
422/129      CHEMICAL REACTOR  
422/198      .Including heat exchanger for reaction chamber  
or reactants located therein
- 2 422/202      (1 OR, 1 XR)  
Class 422 : CHEMICAL APPARATUS AND PROCESS DISINFECTING,  
DEODORIZING, PRESERVING, OR STERILIZING  
422/129      CHEMICAL REACTOR  
422/198      .Including heat exchanger for reaction chamber  
or reactants located therein  
422/202      ..Heat-exchange jacket surrounding reaction  
chamber
- 2 426/521      (0 OR, 2 XR)  
Class 426 : FOOD OR EDIBLE MATERIAL: PROCESSES,  
COMPOSITIONS, AND PRODUCTS  
426/665      PROCESSES  
426/520      .Heating above ambient temperature  
426/521      ..Pasteurizing or sterilizing
- 2 429/20      (1 OR, 1 XR)  
Class 429 : CHEMISTRY: ELECTRICAL CURRENT PRODUCING  
APPARATUS, PRODUCT, AND PROCESS  
429/12      FUEL CELL, SUBCOMBINATION THEREOF OR METHODS OF  
OPERATING  
429/19      .Having means for active material generation or  
regeneration

429/20 ..By heating or cooling

2 431/115 (2 OR, 0 XR)

Class 431 : COMBUSTION

431/115 COMBUSTION PRODUCTS RETURN STRUCTURE

2 431/215 (0 OR, 2 XR)

Class 431 : COMBUSTION

431/207 HEATED LINE SECTION FEEDS FLAME HOLDER

431/215 ..Distinct exhaust products line heats feed line

2 431/328 (0 OR, 2 XR)

Class 431 : COMBUSTION

431/326 POROUS, CAPILLARY, PARTICULATE OR SIEVELIKE  
FLAME HOLDER, E.G., RADIANT SURFACE BURNER, ETC.

431/328 ..Means supplying fuel for passage through the  
flame holding structure, e.g., radiant surface burner

2 432/180 (0 OR, 2 XR)

Class 432 : HEATING

432/120 WORK CHAMBER HAVING HEATING MEANS

432/159 ..Combustion products heat work by contact

432/179 ..Work chamber exhaust heats chamber feed

432/180 ...By regenerative-type heat exchanger

2 432/181 (2 OR, 0 XR)

Class 432 : HEATING

432/120 WORK CHAMBER HAVING HEATING MEANS

432/159 ..Combustion products heat work by contact

432/179 ..Work chamber exhaust heats chamber feed

432/180 ...By regenerative-type heat exchanger

432/181 ....Spaced alternating or successive chamber  
exhausts feed plural regenerators